Summary Report for Grades K-2

Carolina Biological Supply Co. Math Out of the Box, Grade K (only)

Degree of Evidence regarding the Standards for Mathematical Practice:

Moderate evidence

Summary of evidence:

- 1. Make sense of problems and persevere in solving them. There is moderate evidence of this practice throughout this series. Reviewers cited many opportunities for students to make sense and meaning of problems. Evidence was cited of students being asked to explain, analyze, monitor, plan a solution, and evaluate their thinking through questioning. Open-ended questions are evident in the teacher edition, but few examples of multiple approaches, and multiple representations were cited.
- 2. **Reason abstractly and quantitatively**. There is minimal evidence to support this practice throughout this resource. There was evidence found to support representing scenarios symbolically, but reviewers found few opportunities for students to think about the reasonableness of their results.
- 3. Construct viable arguments and critique the reasoning of others. There was moderate evidence found of this practice throughout the series. Opportunities for students to make and test conjectures are strongly supported in this resource. Evidence was found of the use of prior knowledge to support and apply to new learning. Few non-examples were found in the materials. Students have many opportunities to construct viable arguments and critique the reasoning of others if the teacher used the reflection portion of each lesson.
- 4. **Model with mathematics.** This practice is especially well developed throughout this resource. Lessons and student workbook activities are connected to real-life situations and have students create mathematical models to solve problems. Strong evidence was found of students using concrete models/tools to map quantities, and students are encouraged to analyze and draw their conclusions using different representations.
- 5. **Use appropriate tools strategically.** There is minimal evidence for this practice. Tools are available in many lessons (balances, thermometers, clocks, digital/analog clocks, calendars, coins, and other manipulatives), but little evidence was found for students using tools strategically. No use of technology was cited.
- 6. Attend to precision. There is moderate evidence to support development of this practice. Multiple opportunities for student communication were cited. Vocabulary resources are evident throughout and the examples model precision. The student workbook includes appropriate mathematical vocabulary.
- 7. Look for and make use of structure. There is limited evidence of this practice throughout this series. Reviewers found some evidence of prior learning referenced and applying prior learning to new learning. Evidence for identifying patterns and structures was found, but no evidence was found of students moving from specific examples to some level of generalization.
- 8. Look for and express regularity in repeated reasoning. There is minimal evidence of this practice in the sampled materials of this series. Some evidence was found in students noticing repetitiveness and reasonableness, but evidence for students discovering, understanding or using shortcuts is lacking.